

GRADING/BMP NOTES COUNTY OF SAN DIEGO TRACT 5406RPL2

EROSION CONTROL NOTES

- IN CASE EMERGENCY WORK IS REQUIRED, CONTACT THOMAS CLOTFELTER AT (858) 756-2422
- 2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS
- DEVICES SHOWN ON PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT APPROVAL OF THE ENGINEERING
- THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE COUNTY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL. 5. FOR PERMANENT EROSION CONTROL PURPOSES, BFM MUST BE INSTALLED IN
- THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE COUNTY ENGINEER DUE TO UNCOMPLETED GRADING OPERATION OR UNFORSEEN CIRCUMSTANCES WHICH MAY ARISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHEN IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
- 7. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED
- GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORK DAY.
- ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
- 10. SHOULD GERMINATION OF HYDROSEEDED SLOPES FAIL TO PROVIDE EFFECTIVE COVERAGE OF GRADED SLOPES (90% COVERAGE) PRIOR TO NOVEMBER 15. THE SLOPES SHALL BE STABILIZED WITH PUNCHED STRAW INSTALLED IN ACCORDANCE WITH SECTION 35.023 OF THE EROSION AND SEDIMENT CONTROL HANDBOOK OF THE STATE OF CALIFORNIA DEPARTMENT OF CONSERVATION.

HYDROSEED

- 1. HYDROSEEDING SHALL BE APPLIED TO ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THEY ARE:
- A. THREE FEET OR MORE IN HEIGHT IN FILL AREAS.
- B. 5 FEET OR MORE IN HEIGHT IN CUT AREAS, UNLESS SLOPE IS NOT SUBJECT TO EROSION DUE TO THE EROSION RESISTANCE CHARACTER OF THE MATERIAL AS APPROVED BY THE CITY ENGINEER,
- IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT OPTIMUM LEVEL FOR GROWTH OF THE HYDROSEEDED GROWTH.
- TRACKING, MULCH, WOOD CHIPS, HYDROSEEDING WITHOUT WATERING, JUTE MATTING OR JUTE NETTING MAY BE USED TO PROTECT DISTURBED SOIL AREAS THAT ARE FLAT AND LEVEL (LESS THAN 5% SLOPE).
- 4. HYDROSEEDING SHALL BE PERFORMED PRIOR TO ROUGH GRADE INSPECTION.

GRAVEL BAGS NOTES

1.) GRAVEL BAGS SHALL BE PLACED ALONG ALL STREET AND DRIVEWAYS BASED UPON THE FOLLOWING FORMULA:

GRAVELBAGS SPACING (FEET)=

EXAMPLE: 12.00% STREET

STREET SLOPE

= 12.5' SPACING

BONDED FIBER MATRIX

BONDED FIBER MATRIX SHALL BE APPLIED TO ALL FINISHED SLOPES IMMEDIATELY UPON COMPLETION PER TIME FOLLOWING:

- 1. APPLICATION RATES SHALL BE 3500 POUNDS PER ACRE MINIMUM FOR 2:1 OR SHALLOWER SLOPES AND 4000 POUNDS PER ACRE FOR SLOPES STEEPER THAN 2:1.
- 2. BFM SHALL BE APPLIED AT LEAST 24 HOURS BEFORE OR AFTER RAINFALL.
- 3. THE SITE MUST BE PROTECTED WITH BROW DITCHES AND/OR DIVERSION BERMS AT THE TOP OF SLOPES TO DIVERT FLOW FROM FACE OF THE SLOPE.
- 4. BFM SHALL BE APPLIED TO PROVIDE 100% COVERAGE (I.E. APPLICATION FROM MULTIPLE ANGLES).

CONJUNCTION WITH SEED EROSION CONTROL VEGETATION.

6. A LETTER FROM THE HYDROSEED CONTRACTOR CERTIFYING THAT THE BFM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED APPLICATION RATES AND COVERAGE REQUIREMENTS SHALL BE SUBMITTED TO THE COUNTY INSPECTOR

SPECIAL NOTES

FOR APPROVAL.

- IT SHALL BE THE OWNERS RESPONSIBILITY TO MAINTAIN ALL DRAINAGE SYSTEMS FREE AND CLEAR OF ALL OBSTRUCTIONS IN ORDER TO ASSURE PROPER OPERATION.
- TW AND BW GRADES REPRESENT THE GROUND ELEVATION AT THE BACK AND FRONT OF THE WALL. THE ACTUAL TOP-OF-WALL AND TOP-OF-FOOTING AND WALL DIMENSIONS TO BE DETERMINED BY THE WALL DESIGNER
- ROOF GUTTERS REQUIRED FOR ALL SECOND STORY OVERHANGS.
- THE LOCATION OF INDIVIDUAL UNDERGROUND UTILITY SERVICES, PRIVATE SEWAGE DISPOSAL SYSTEMS, IRRIGATION SYSTEMS AND SATELLITE CABLE TV SERVICES IS NOT KNOWN. THIS INCLUDES BUT IS NOT LIMITED TO, ELECTRIC SERVICE LINES, GAS TANKS, GAS SERVICE LINES, TELEPHONE SERVICE LINES, WATER SERVICE LINES, CABLE TV LINES, SEPTIC TANKS, LEACH LINES, TIGHT LINES, SEEPAGE PITS, IRRIGATION LINES, SPRINKLERS, VALVES, AND SATELLITE TV CABLE. THE CONTRACTOR WILL PERFORM THE NECESSARY RESEARCH. MAKE EXPLORATORY EXCAVATIONS AND/OR LOCATE THESE SYSTEMS/SERVICES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING SYSTEMS/SERVICES. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THESE SERVICES AS PART OF HIS WORK.
- EARTHWORK QUANITIES FOR PERMIT PURPOSES ONLY. CONTRACTOR TO CALCULATE ALL QUANTITIES.
- DRIVEWAYS MAY BE IMPROVED WITH ASPHALT CONCRETE, CONCRETE, OR PAVERS. CONCRETE IS NOT PERMITTED IN THE PUBLIC RIGHT-OF-WAY UNLESS THERE IS AN EXISTING CONCRETE CURB. PAVERS ARE NOT PERMITTED IN THE RIGHT-OF-WAY

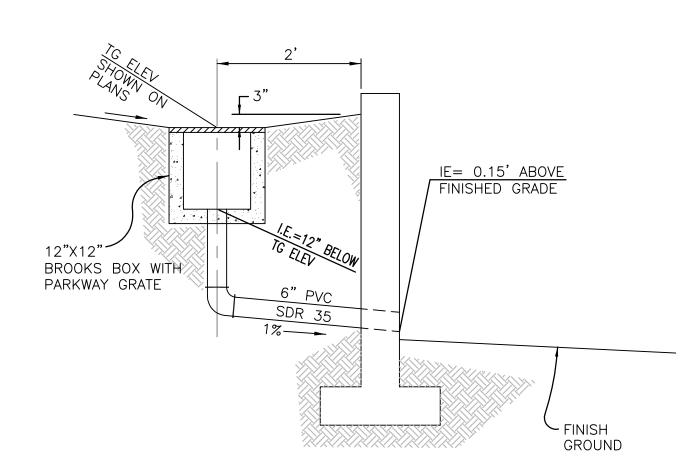
SOIL STABILIZATION FOR 5% AND FLATTER

FLAT AREAS OF LESS THAN 5%(LIKE BUILDING PADS, PARKING AREAS, LEACH FIELDS) SHALL HAVE 100% PROTECTION USING GEOTEXTILES, MATS (SS-7 OR ESC20), OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR USING MULCH/WOOD CHIPS (SS-3, SS-6, SS-8), OR JUTE MATTING (SS-7), THE COUNTY MAY REDUCE THIS REQUIREMENT FOR FLAT AREAS, PROVIDED FULL SEDIMENT CONTROL IS PROVIDED THROUGH CONSTRUCTED AND MAINTAINED DESILTATION BASINS (SC-2) AT ALL PROJECT DISCHARGE POINTS.

AREAS OF GRADED PADS THAT HAVE ACTIVE STRUCTURE CONSTRUCTION UNDERWAY MAY BE PROTECTED BY ROLLED PLASTIC AS PART OF A WEATHER-TRIGGERED ACTION PLAN UNTIL THE STRUCTURE'S ROOF HAS BEEN COMPLETED. THE REMAINDER OF THE PAD AREAS MUST CONTINUE TO BE PROTECTED USING EROSION CONTROL MEASURES AS IDENTIFIED ON THIS PLAN SET.

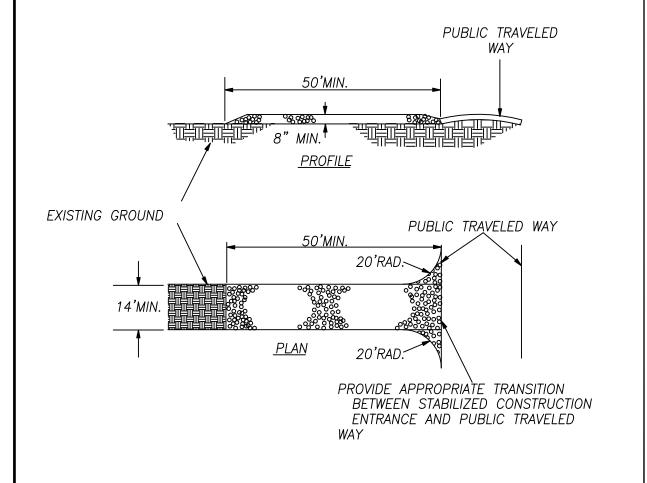
STORMWATER MANAGEMENT NOTES

- 1. DURING THE RAINY SEASON FROM OCTOBER 1ST TO APRIL 1ST THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED WITHIN 48 HOURS OF A PREDICTED RAIN.
- 2. 125% OF ALL NEEDED BMP MATERIALS SHALL BE STORED ONSITE YEAR-ROUND, TO ALLOW FULL DEPLOYMENT AND INSTALLATION WITHIN 48 HOURS OF
- THE PROPERTY OWNER SHALL COMPLY WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMPs THAT HAVE BEEN INCORPORATED INTO THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT ONSITE EROSION AND TO PREVENT DISCHARGES OF POLLUTANTS FROM LEAVING THE SITE. MAINTENANCE OF BMPs IS THE RESPONSIBILITY OF THE PROPERTY OWNER AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMPs MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED BMPs FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE AS SOON AS IT IS SAFE TO DO SO.
- 4. PERIMETER SEDIMENT CONTROL BMPs SHALL BE INSTALLED IMMEDIATELY AFTER THE AREA TO BE GRADED IS BRUSHED OR CLEARED, BUT PRIOR TO THE START OF GRADING OPERATIONS.
- 5. EROSION CONTROL BMPs USED FOR SLOPE STABILIZATION SHALL BE INSTALLED AS SOON AS THE FINISHED SLOPES ARE COMPLETE.
- 6. A PERIMETER BMP INSPECTION IS REQUIRED ON THE FIRST DAY OF GRADING.

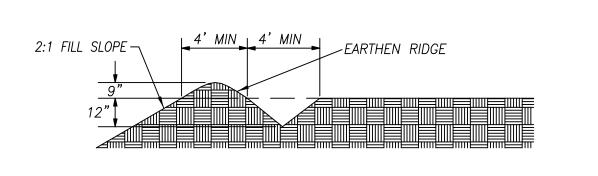


TYPICAL GRATE DETAIL

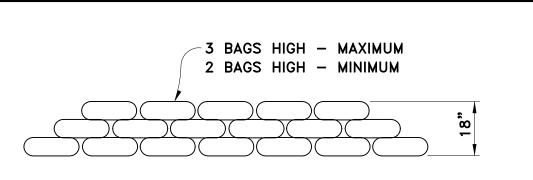
SET POSTS AND EXCAVATE A 2. STAPLE WIRE FENCING TO 4 BY 4 IN (10 BY 10 CM) THE POSTS. TRENCH UPSLOPE FROM AND ALONG THE LINE OF POSTS. 3. ATTACH THE FILTER FABRIC TO 4. BACKFILL AND COMPACT THE THE WIRE FENCE AND EXTEND IT EXCAVATED SOIL. INTO THE TRENCH. SILT FENCE



STABILIZED CONSTRUCTION ENTRANCE



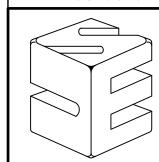
UNLINED SWALE & BERM



TEMPORARY GRAVEL BAG CHECK DAM

SDE 4338

| DATE: 08/09/07



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